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PTO/SB/21 (09-04)

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission	19	Application Number	10/612,884
		Filing Date	July 2, 2003
		First Named Inventor	Michael Houghton
		Art Unit	1653
		Examiner Name	Stacy B. Chen
		Attorney Docket Number	PP019545.003 (2300-19545)

ENCLOSURES *(Check all that apply)*

- ☒ Fee Transmittal Form (1 page duplicate)
  - ☐ Fee Attached
- ☒ Amendment/Reply (15 pages)
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosure(s) (please identify below):

Check for $1300.00

Return Receipt Postcard

Remarks The Commissioner is authorized to charge any additional fees to Deposit Account .

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Chiron Corporation		
Signature			
Printed name	Roberta L. Robins		
Date	3/24/05	Reg. No.	33,208

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Denise M. Vaillancourt	Date	3/24/05

PTO/SB/17 (12-04)

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($) 1300.00

Complete if Known	
Application Number	10/612,884
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METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 18-1648 Deposit Account Name: Robins & Pasternak LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Small Entity Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims		Extra Claims		Fee ($)		Fee Paid ($)
58	-20 or HP =	40 = 18	x	50	=	900

HP = highest number of total claims paid for, if greater than 20

Indep. Claims		Extra Claims		Fee ($)		Fee Paid ($)
6	-3 or HP =	4 = 2	x	200	=	400

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims	
Fee ($)	Fee Paid ($)

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof		Fee ($)		Fee Paid ($)
	- 100 =		/ 50 =		(round **up** to a whole number) x		=	

4. OTHER FEE(S)0

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	
Other: _____	

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	Telephone (650) 493-3400
Name (Print/Type)	Roberta L. Robins	33,208	Date 3/24/05

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

3/24/05
Date

Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

MICHAEL HOUGHTON — Confirmation No.: 6634

Serial No.: 10/612,884 — Art Unit: 1653

Filing Date: July 2, 2003 — Examiner: Stacy B. Chen

Title: HCV FUSION PROTEINS WITH MODIFIED NS3 DOMAINS

RESPONSE TO REQUIREMENT FOR RESTRICTION AND PRELIMINARY AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This paper is presented in response to the restriction requirement mailed February 24, 2005, with a shortened statutory period of one month for response. Accordingly, this paper is timely filed.

Also accompanying this response is a Preliminary Amendment. Reconsideration of the application is requested in view of the following amendments and remarks.

RESPONSE TO REQUIREMENT FOR RESTRICTION

The Examiner identified 13 groups of claims as follows:

Groups I, claims 19-21, drawn to a method of stimulating an immune response;

Group II, claims 25-40, drawn to a polynucleotide,

with further restriction of Groups I and II required between one embodiment from claim 13(a)-(j) and claim 14(a)-(j);

Group III, claims 2 and 15, drawn to a fusion protein comprising a modified NS3 polypeptide and an HCV polypeptide other than NS3, wherein the modification comprises an amino acid substitution corresponding to His-1083, Asp-1105 and/or Ser-1165;

Group IV, claims 3, 13(a) and 14(a), directed to a fusion protein comprising a modified NS3 polypeptide, an NS4 polypeptide, an NS5a polypeptide, and optionally a core polypeptide;

Group V, claims 4, 13(b) and 14(b), directed to a fusion protein comprising a modified NS3 polypeptide, an NS4 polypeptide, an NS5a polypeptide, an NS5b polypeptide, and optionally a core polypeptide;

Group VI, claims 5, 13(c) and 14(c), directed to a fusion protein comprising a modified NS3 polypeptide, an E2 polypeptide, a p7 polypeptide, an NS2 polypeptide, an NS4 polypeptide, an NS5a polypeptide, and optionally a core polypeptide;

Group VII, claims 6, 13(d) and 14(d), directed to a fusion protein comprising a modified NS3 polypeptide, an E1 polypeptide, an E2 polypeptide, a p7 polypeptide, an NS2 polypeptide, an NS4 polypeptide, an NS5a polypeptide, and optionally a core polypeptide;

Group VIII, claims 7, 13(e) and 14(e), directed to a fusion protein comprising a modified NS3 polypeptide, an E2 polypeptide, an NS4 polypeptide, an NS5a polypeptide, and optionally a core polypeptide;

Group IX, claims 8, 13(f) and 14(f), directed to a fusion protein comprising a modified NS3 polypeptide, an E1 polypeptide, an E2 polypeptide, an NS4 polypeptide, an NS5a polypeptide, and optionally a core polypeptide;

Group X, claims 9, 13(g) and 14(g), directed to a fusion protein comprising a modified NS3 polypeptide, an E2 polypeptide, and optionally a core polypeptide;

Group XI, claims 10, 13(h) and 14(h), directed to a fusion protein comprising a modified NS3 polypeptide, an E1 polypeptide, an E2 polypeptide, and optionally a core polypeptide;

Group XII, claims 13(i) and 14(i), directed to a fusion protein comprising a modified NS3 polypeptide, an E2 polypeptide, a p7 polypeptide, an NS2 polypeptide and optionally a core polypeptide; and

Group XIII, claims 13(j) and 14(j), directed to a fusion protein comprising a modified NS3 polypeptide, an E1 polypeptide, an E2 polypeptide, a p7 polypeptide, an NS2 polypeptide, and optionally a core polypeptide.

Applicants note claims 1, 11, 12, 16-18 and 22-24 are considered to link the claims of Groups III-XIII and that upon allowance of the linking claims, the restriction requirement as to the linked inventions will be withdrawn. Applicants assume that new claims 45, 46, 49 and 50, presented in the Preliminary Amendment, will also be considered linking claims.

Applicants elect to proceed with the claims of Group V, claims 4, 13(b), 14(b), and new claims 41 and 42, with traverse. Applicants expressly reserve their right under 35 USC §121 to file one or more divisional applications directed to the nonelected subject matter during the pendency of this application.

Applicants traverse this restriction requirement for the following reasons. All of the claims of Groups III-XIII pertain to fusion proteins including a modified NS3 polypeptide and at least one additional HCV polypeptide. Applicants submit a search of the claims of Groups III-XIII together would not be overly burdensome for the Examiner as a search for a fusion protein containing a modified NS3 polypeptide would inevitably turn up art directed to fusion proteins containing a modified NS3 polypeptide in combination with the various HCV polypeptides as claimed in each of Groups III-XIII.

> MPEP §803 states:
> If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent and distinct inventions. (Emphasis added.)

Applicants submit that an examination of the claims as proposed above, would not impose a serious burden on the Examiner. Indeed, applicants believe that failure to examine the claims as proposed would pose a far greater burden on the Patent and

Trademark Office, by requiring a duplication of effort and resources, since a search directed to the claims of each of Groups III-XIII would turn up overlapping art if such art existed. Accordingly, applicants respectfully traverse the above restriction requirement and request reconsideration thereof.